

# Network News

*It takes a Network to protect a watershed.*



## Harmful Algal Blooms 2019 Monitoring & Reporting

**Hilary Lambert** Steward/Executive Director, Cayuga Lake Watershed Network

*The Network is again teaming with the Community Science Institute (CSI) this year to track Harmful Algal Blooms around Cayuga Lake from July through October. Around seventy people have been trained at three HABS Harriers workshops held during June, led by Nathaniel Launer of CSI and Tony Prestigiacomo, DEC Hub.*

**CSI** is building a new data tracking and mapping tool that they will unveil soon for all to use. We have a great new HABS Communications Intern, Jessica Biggott (see her early July HABS Update below, and her biography on page 6), thanks to Lauren Chambliss and the Cornell University Communications Program. And—we have a great set of Quadrant Leaders to coordinate the volunteers and public response lakewide.

Have a vision: to focus public attention on water quality issues and form cooperative partnerships both within and outside of the CLWN to develop action plans for mitigating and solving water quality problems. Additionally, many individuals and small groups are sampling water bodies around the watershed. This committee hopes to connect them all, especially those operating at the lake's north end.

Returning QLs are Andy Yale (southwest); Bill Ebert (northwest); Christy Gunderson VanArnum (northeast); and our new QL for the southeast quadrant is Glenn Ratajczak. Glenn has a deep interest in tracking HABS—he works for the Southern Cayuga Lake Intermunicipal

Water Commission at Bolton Point, which provides lake water to several communities. Thanks Glenn for taking on this big volunteer responsibility. Thank you Steve Knapp for your pioneering work and guidance as the SE Quadrant Leader in 2018. The dividing line for north-south is Sheldrake Point.

We miss the people who helped establish this program in 2018, notably the creator of it all Claire Weston, and our first HABS Intern Carly Shonbrun-Siege; but they are both now embarked on great new careers in related areas!

We are charging forward to do our best to protect the lake and the public from this dismaying new water quality problem. We'll provide more information during the year about causes and solutions. To learn more, consider attending the 2019 Finger Lakes HABS Symposium on July 31 in Geneva, and our annual Meeting & Picnic on August 21 at Ithaca's Cass Park—see Upcoming Events on page 8. We could really use help to raise staff time and travel support funds—see our 2019 Annual Appeal on page 3. 🐦



### Updates

Last week, our 2019 HABS Monitoring Program Quadrant Leaders got together to finalize preparations for the upcoming HABS season. In this week's newsletter, we would like to highlight those four Harriers that are truly going above and beyond for the monitoring program. Additionally, we will answer all of your HABS-related questions this week, just in time for the start of the monitoring season! As always, if you see a suspicious bloom, report it to [habshotline@gmail.com](mailto:habshotline@gmail.com) with the location of the bloom, the date and time, and pictures.



*continued on page 2*

### 2019 HABs Monitoring Program Quadrant Leaders

**Welcome Quadrant Leader Glenn Ratajczak!** Glenn Ratajczak is the Quadrant Leader for the Southeast Quadrant of Cayuga Lake. As Production Manager at Bolton Point Water System, Glenn was already monitoring the shoreline near their intake. So, when he heard about our HABs monitoring program, he said he knew he needed to be a part of this important project!

Glenn has also been a longtime advocate for citizen science. He was one of the founding board members of the Clean Air Coalition of Western New York, which battled a processing plant that was emitting benzene into a nearby neighborhood. He has also worked on bringing participatory budgeting to the City of Buffalo, where community members would have a say in where discretionary funding is spent.

When asked what Cayuga Lake meant to him, Glenn responded, “What Cayuga Lake means to me goes beyond the recreational use and tourism it attracts. It is a lifeline to the community by acting as an almost unlimited source of fresh drinking water, which is becoming more rare around the world due to changing weather patterns. Therefore it is very important that we protect it from natural or anthropogenic sources of contamination.”

When Glenn is not monitoring Cayuga Lake, he said he acts as a roadie for his daughter, who happens to be an amazing drummer!

Welcome to the team, Glenn! We are so thankful for your passion and expertise!

**Welcome Quadrant Leader Andy Yale!** Andy Yale is the Quadrant Leader for the Southwest Quadrant of Cayuga Lake. Andy has been enjoying Cayuga Lake since he was a boy. He likes to sail, motor, fish, and swim, but his favorite lake activity is drifting in a boat on the lake, taking in the wonderful environment. Aside from lake activities, Andy enjoys biking on the Black Diamond Trail.

Cayuga Lake was an important part of Andy’s childhood and his present; he and his family live “just above her shores.” When asked what Cayuga Lake meant to him, Andy responded, “I love the perspective it gives on where we are, placed among the hills.”

Welcome to the team, Andy! We are so thankful to you and your fun-loving spirit!

**Welcome Quadrant Leader Bill Ebert!** Bill Ebert is the Quadrant Leader for the Northwest Quadrant of Cayuga Lake. Bill Ebert and his wife Jane have been living on the northwest shore of Cayuga Lake for 30 years. His relationship with the Cayuga Lake Watershed Network began five years ago when Bill and two of his granddaughters attended an evening workshop held by CLWN Steward, Hilary Lambert, on invasive species. Bill had brought with him a bucket of unidentified slime, hoping to find someone at the workshop who knew what it was. The slime turned out to be cladophora, a non-toxic green algae commonly found in lakes. A few emails later, Bill was elected to the CLWN’s Board of Directors.

As a board member, Bill has initiated many water monitoring campaigns. Due to concern about the quality of the water coming out of Canoga Creek, Bill and the CLWN started a water quality monitoring program on both Canoga and Burroughs Creeks. This program has been going strong for four years now, gathering and publicizing eye-popping data about the sources of pollution on

Cayuga Lake. After the success of this program, Bill is collaborating again with the CLWN and the Finger Lakes Institute to develop a proposal for a pilot restoration project for either Canoga or Burroughs creek with the Citizen Science Institute. Additionally, Bill was enlisted along with his friend, Tom Casella, by the DEC to participate in the Citizens Statewide Lake Assessment Program (CSLAP), and monitor water quality at the north end of Cayuga Lake. Last summer, Bill and Tom did weekly monitoring on a stretch of lakefront to create a census of all plant species found there.

It’s easy to notice Bill’s experience in water quality monitoring and passion for Cayuga Lake. He has been an amazing asset to the CLWN organization due to his stick-to-itiveness, his ambition and his readiness to take action.

Welcome to the team, Bill! Thank you for donating your time, energy and expertise to this program!

### **Welcome Quadrant Leader Christy Gunderson VanArnum!**

Christy Gunderson VanArnum is the Quadrant Leader for the Northeast Quadrant of Cayuga Lake. She grew up and currently resides right on Cayuga Lake in Aurora. After growing up on the lake and falling in love with the water, Christy went back to college for fisheries and aquaculture and received a Masters Degree in Aquatic Science/Aquaculture.

Christy has been working in the field of aquatic sciences for 10 years, and is now a teacher in the area. She still spends her summers on the lake.

Christy’s favorite lake activity is swimming! With a lifetime of experience on the lake, she was able to swim across Cayuga Lake at its widest point to Aurora several years ago. When asked what Cayuga Lake meant to her, Christy responded, “Cayuga Lake is my entire family’s favorite place. It is critical to all who live here.”

Welcome to the team, Christy! We so appreciate your passion and support for the lake!

### **Q&A**

*Thank you to everyone who sent in questions for this week’s newsletter! Below are our answers to them.*

### **Why do cyanobacteria produce toxins?**

Toxins produced by cyanobacteria are considered to be secondary metabolites. This means that these molecules are not essential to the organism’s growth, development, or reproduction (Waters, 2015).

An increased production of these toxins have been observed as a result of zooplankton grazing. Interestingly though, spikes in toxin production have also been observed from cyanobacteria that are simply in the presence of zooplankton. This suggests that zooplankton may emit an infochemical that, when sensed by cyanobacteria, triggers an increase in toxin production. Ecologically, this all suggests that toxin production is an induced defense in cyanobacteria in order to deter grazing (Jang et al., 2003). Not all cyanobacteria are capable of producing toxins, but there is evidence that some copepods have the ability to select non-toxic bacteria to feed on within mixtures of both toxic and non-toxic bacteria, thus contributing to the ecological success of toxin producing cyanobacteria (Jang et al., 2003).

*continued on page 6*



Cayuga Lake Watershed Network  
170 Main Street POB 348  
Aurora NY 13026  
[www.cayugalake.org](http://www.cayugalake.org)

## *It takes a Network to protect a watershed!*

### 2019 Annual Appeal Underway!

July 2019

Dear Friends,

**AS** the federal government withdraws from protecting America's waters, only **local vigilance** and **action** will safeguard and protect Cayuga Lake. With the support of our members and supporters, the Cayuga Lake Watershed Network (CLWN) is working to **assure that Cayuga Lake remains a valuable and wonderful resource for generations to come.**

**Please give to our 2019 annual appeal—funds that will be used to keep the public informed about HABs—Harmful Algal Blooms!**

In 2018, public support enabled CLWN to maintain and enhance programs that successfully combatted threats to the lake—**our response to HABs being just one key effort in 2018.**

With HABs, as with all our programming, we emphasize *education, mobilization, facilitation, and collaboration* as key strategies to maximize program impact. In the case of HABs, we collaborated with the Cayuga Lake HABs Monitoring Team, Community Science Institute, NYS DEC, Departments of Health, and other agencies; facilitated the HABs work of our partners and local governments; educated the public about how land use and climate change have impacted HABs and provided safety guidelines on using the water during a bloom; and we mobilized over 100 members and other volunteers who collected suspect water samples for scientific assessment.



Tom Casella  
sampling HABs on  
the Canoga shores

**Our HABs efforts are in full swing in 2019.**  
**Annual Appeal donations have huge impacts on the Network's successful efforts to protect Cayuga Lake.**

**PLEASE HELP MAKE THE DIFFERENCE THIS YEAR.**

**Generously support our HABs work and all of our programs in 2019.**

### **THANK YOU...**

hope to hear from you soon. Have a healthy, positive, water-loving summer season.

**Hilary Lambert**, Steward/Executive Director;  
[steward@cayugalake.org](mailto:steward@cayugalake.org)  
**Jennifer Tufano Grillo**, Program Associate;  
[programs@cayugalake.org](mailto:programs@cayugalake.org)

Please donate or join by mailing your check to Cayuga Lake Watershed Network, P.O. Box 348, Aurora, NY 13026 or with PayPal by visiting [www.cayugalake.org](http://www.cayugalake.org).



# Remembering Jim White

## The Network's founding Board chair

**Hilary Lambert** *On behalf of Jim's family and friends*

*I was introduced to Jim at our Sunset on Cayuga dinner in the fall of 2009, when he was a youthful 93 years old. I was new to my job as Executive Director, so we had a lot to chat about. And then—we danced to the live band music. I am not much of a dancer, but he gracefully led me round the floor for a few minutes.*

Jim received the David Morehouse Award from us that year, which recognizes leadership and commitment from individuals or organizations to protect the health and beauty of the Cayuga Lake Watershed. He wrote “a little light verse” about the lake that was read to a delighted audience at the dance, and is shared below (it first appeared in 2003 issue 3 of *Network News*).

During Jim's memorial service last month at the Ithaca Yacht Club, family and friends brightened and chuckled when I said we'd danced—“he was a real dancer,” they said, “he and Ruth” (wife Ruth Babcock White, who died in 1998) “really loved to dance. A lot!” This reminiscence would then spark memories of how much he loved people, and life—and Cayuga Lake. Thanks to the support of friend Elizabeth Thorndike and family, Jim White died quietly in his lakeside home on October 2.



*James C. White, 1916 - 2018. CLWN's founding Chair.*

Perusing the Network's meeting minutes and founding documents from the late 1990s, I found Jim's presence throughout, along with that of Elizabeth Thorndike and other visionaries at Cornell and in the wider lake community. They worked together as an expert, fluid, informal team to create an organization to centralize research about the watershed and promote its protection long-term. After retirement in 1983, Jim researched, wrote and published about acid rain and climate change.

With Jim's family and friends, the Network is establishing the Jim White Award in his honor, companion to our long-established David Morehouse Award—more to come about both in our next newsletter issue. Following are his Cornell Chronicle obituary from October 2018, and his poem, “The Lake's ABCs.” We'll have more about Jim White and the Network's early days in future issues.

## Remembering Jim White

The 2009 winner of the David Morehouse Award was James C. White, one of the founders of the Cayuga Lake Watershed Network in 1997. This award was established by the Morehouse family in honor of the late David Morehouse, who worked for many years on behalf of our incomparable Cayuga Lake. Presented to James White by Claire Morehouse, the award recognizes leadership and commitment from individuals or organizations to protect the health and beauty of the Cayuga Lake Watershed. James White read a “little light verse” about the lake, written specially for the occasion.

### **The Lake's ABCs** *James White*

The Lake's an enigma,  
She's hard to explain  
Her moods can be many  
In sunshine and rain.

To simplify matters  
And do it with ease,  
This doggerel follows  
The Lake's ABCs.

Note as you listen  
How we have met,  
The use of all letters  
In our alphabet.

So----

She can be Alarming  
But Beautiful too,  
Calm or Destructive  
With Elegant hue.

She's Fulsome or colored,  
So Grand in the fall.  
She can be Horrible  
In view of us all.

Don't take her lightly  
In word or in Jest,  
She can be a Killer,  
When wind's from the west.

In spring she is Lovely,  
In summer there's Mist,  
With Natural beauty  
Her face has been kissed.

In winter she's Open and  
Pretty and Quiet  
Rough, Smooth and Tricky  
While geese over fly it.

She's Unusual and Vicious,  
Warm, Windy and Wet,  
But Xcellent sailing,  
The best you have met.

Her weeds can be Yucky,  
Her Zebras grow fast  
And that is her alphabet,  
We're through it at last!

## Dairy, food safety expert James White dies at 101

By Krishna Ramanujan

Cornell Chronicle, October 22, 2018

James C. White '39, Ph.D. '44, professor emeritus in the Cornell School of Hotel Administration, died Oct. 2 at his home in Ithaca, less than a month shy of his 102nd birthday.

White had a wide-ranging career that included dairy and food safety research, and after retirement, he worked in areas of climate change and acid rain.

White was born Oct. 29, 1916, in Scobey, Montana. While earning his doctorate in bacteriology with minors in biochemistry and dairy science, White worked in the lab of Cornell chemist and 1946 Nobel laureate James B. Sumner.

White served as director of research for the Borden Cheese Co. from 1944 to 1946, before Cornell hired him as an associate professor in the Department of Dairy Industry in the College of Agriculture and Life Sciences (CALS), where he conducted research and extension work, and taught classes.

After 27 years at CALS he switched to the hotel school, where he taught food safety and sanitation, and served as an assistant dean. Though he retired in 1983, he continued to work in the areas of climate change and acid rain, and edited and published 16 conference proceedings.

John Clark, Ph.D. '69, professor and dean emeritus of the hotel school, remembered White as a caring and supportive colleague. Clark became the hotel school dean in 1981.

"He served me very well and helped immensely as I transitioned from professor to dean," Clark said. "From 1981 to his retirement in 1983, Jim showed wonderful assistant dean capabilities in dealing with the needs of both graduate and undergraduate students, as well as faculty, staff and alumni. All felt he had their best interests at heart and that his advice and counsel were excellent."

Over the course of his career, he served as president of the New York State Association for Food Protection; chairman of the Tompkins County Environmental Management Council; founding chair of the Cayuga Lake Watershed Network; scientific adviser and director of the Center for Environmental Information in Rochester, New York; founding president of the Mariposa DR Foundation in the Dominican Republic; and commodore of the Ithaca Yacht Club.

In 2011, a gift from Jay '71, M.Eng. '72 and Julie Carter '71 named a conference room for White in the newly renovated Stocking Hall. ♡

## Hydrilla 2019

### It's in the lake. Please help watch for it!

*Hydrilla is an invasive aquatic plant that grows rapidly to form choking green mats in water up to 30 feet deep. Florida and other states spend millions of dollars annually to try to control its spread. What is its present known status on Cayuga Lake?*

- In August 2011, hydrilla (*Hydrilla verticillata*) was found in 166 acres of the Cayuga Inlet in Ithaca NY. In 2019, hydrilla is no longer present in the Inlet or in adjacent Fall Creek, thanks to effective treatment, which is no longer needed. Monitoring continues by Bob Johnson and Racine Johnson Associates.
- A 30-acre area of hydrilla infestation was found in 2016 offshore of Aurora, on the lake's eastern shore. Today a wider area is being treated and monitored by the USACE in cooperation with Cayuga County authorities, Wells College staff and elected leaders of the Village of Aurora.
- Hydrilla plants found in shallow water offshore of Ithaca's Stewart Park in 2014 have been treated and monitored since 2018. Starting in late June this year, weekly treatments are being carried out by the US Army Corps of Engineers (USACE) in cooperation with the Hydrilla Task Force of Cayuga Lake (south end), which is guided by the Soil and Water Conservation District Office of Tompkins County. A plant found last fall on the Inlet's northwest corner by Hydrilla Hunter Paul Closs will be covered by a benthic mat, an effective non-chemical treatment for small areas of hydrilla growth.
- Hydrilla was found at Don's Marina in King Ferry, on the lake's east shore, in 2019. The marina was dredged during the winter months. Weekly monitoring is carried out by Jared Bedient and Emelia Yost, staff at the Finger Lakes PRISM (Partnership for Regional Invasive Species Management) program at the Finger Lakes Institute in Geneva. They found the plants last fall during a kayak-based survey of Cayuga Lake's entire shoreline.

#### Hydrilla Hunters needed lakewide

It seems highly likely that hydrilla will be found at additional sites around the lake, carried and dropped by boats and birds, and taking root quietly in shallow backwaters. Please help us find it early so that expensive, multi-year, chemicals-based treatments can be minimized or avoided.

Network staff Jenn Tufano Grillo is managing our program to install and re-fill hydrilla information boxes at approximately sixty five launches, marinas and parks around the lake. This work was pioneered by Dave Heck of Lansing. Jenn's volunteer team includes Tom Casella, Lynn Leopold, and the Jared-Emily team from Finger Lakes PRISM.

We have information for you on how to identify and report hydrilla. We have lake rakes for you to use off your dock or boat to check lake water for the presence of hydrilla. This is especially important from July into late autumn, when hydrilla plants are at their full extent. Please contact Jenn at [programs@cayugalake.org](mailto:programs@cayugalake.org) to receive information and arm yourself with a lake rake. These are free services that we provide to help protect Cayuga Lake. Your paid membership and annual donations are of course welcome—see the Annual Appeal article on page 3. ♡

# Welcome to CLW's Summer Intern

**Hi!** My name is Jessica Biggott, and I am the 2019 Cayuga Lake Watershed Network HABs Communications Intern! Some of the basics about me: I'm a rising senior at Cornell, I'm studying Environmental and Sustainability Sciences (ESS), and I'm from just outside Detroit, Michigan. After graduation, I hope to attend graduate school to further my studies in the field of ecological economics. Specifically,

I am interested in common pool resource management, such as fisheries.

When I'm not working or studying for the GRE this summer, I can often be found hiking or collecting insects. So, if you know of any good trails or have any collecting tips, let me know! I'm thrilled to spend this summer working with such a fantastic organization! If you see me around the lake, don't be afraid to say hi! 🐾



## HABs Update—Week of July 1st, 2019 *continued from page 2*

While there is evidence that toxins are produced as a defense mechanism, some also hypothesize that toxin production may be a stress response to several abiotic factors including, but not limited to, salinity, temperature, light intensity, and nutrients (Jang et al., 2003). As with most things involving cyanobacteria it seems, more research is necessary to fully understand these creatures!

### What are the causes of HABs?

According to a study conducted by the DEC, four factors were found to be correlated with HABs occurrences: phosphorus levels, presence of dreissenid mussels, maximum lake fetch length, and the lake compass orientation of its maximum length. For every 0.01mg/L increase in Phosphorus levels, the probability that a body of water will produce a HAB increases by roughly 10-18%. However, the other three factors have a much greater range of uncertainty. The presence of dreissenid mussels are estimated to increase the probability of HABs by 18-66%, a northwest orientation of the longest fetch length is estimated to increase HABs probability by 10-56%, and finally, every mile of increased fetch lake is estimated to increase the probability of HABs by 20%. More information on this can be found in the Cayuga Lake HABs Action Plan here: [https://www.dec.ny.gov/docs/water\\_pdf/cayugahabplan.pdf](https://www.dec.ny.gov/docs/water_pdf/cayugahabplan.pdf).

While these four factors were identified by the DEC, they are likely not the only four that exist. According to Rollwagen-Bollens et al. (2018), "Many different biotic and abiotic factors influence the dynamics of cyanobacterial blooms, often acting synergistically." This likely contributes to the difficulty in predicting cyanobacteria bloom occurrences. As noted in the Cayuga Lake HABs Action Plan, some lakes that seem to have all of the factors that contribute to HABs development will not experience HABs, while there have been harmful blooms in lakes that have lower nutrient levels and likewise would not have been predicted to have HABs.

Though we are certainly on the path to understanding these mysterious cyanobacteria, I think it is safe to say that we are not quite there yet. With further research and detailed datasets (like those produced from lake monitoring!), we can hopefully grow to better understand the factors that influence HABs in the near future.

### Do cyanobacteria generate any positive impacts, or are they all bad?

Though aggregations of cyanobacteria can prove to be harmful, these microorganisms are important primary producers. In fact,

they are responsible for about 30% of the annual oxygen production on Earth (DeRuyter & Fromme, 2008). In addition, cyanobacteria are a very diverse and relatively unexplored group of organisms, presenting a great opportunity for scientific discovery (Sharma et al., 2010). For example, though microcystin, a toxin produced by cyanobacteria, is toxic to humans, it has been found to contain some anti-cancer properties, making it an excellent prospect for the development of pharmaceuticals (Dixit & Suseela, 2013). A few species of cyanobacteria have also shown some promise as potential candidates for biofuel production (Sharma et al., 2010). So, even though HABs are a growing nuisance in the lake, cyanobacteria themselves are not inherently bad. They even seem to have the potential to produce some really wonderful discoveries! (*Please refer to "Algal Blooms" at our website for full citations.*)

### I don't have time to become a HABs Harrier, but is there anything else that I can do to prevent HABs?

Yes! Watershed residents can do their part by taking action to reduce nutrient pollution in Cayuga Lake. This can be done through the following:

- Limiting lawn fertilization
- Maintaining septic tanks
- Installing and maintaining shoreline buffers
- Reducing erosion and stormwater runoff
- Improving water movement

More detailed information on these strategies can be found on the DEC website here: <https://www.dec.ny.gov/chemical/82123.html>

HABs Update Editor: Jessica Biggott, Cayuga Lake Watershed Network 2019 HABs Communication Intern [habsintern@gmail.com](mailto:habsintern@gmail.com)

The Cayuga Lake HABs Monitoring Program is a collaborative effort led by a local consortium of three nonprofits: The Community Science Institute (CSI), the Cayuga Lake Watershed Network (CLWN), and Discover Cayuga Lake (DCL), working in collaboration with the New York State Department of Environmental Conservation (NYSDEC) and the State University of New York Environmental School of Forestry (SUNY-ESF).

- Cayuga Lake Watershed Network [programs@cayugalake.org](mailto:programs@cayugalake.org) 607-319-0475
- Community Science Institute [info@communityscience.org](mailto:info@communityscience.org) 607-257-6606 🐾



# Upcoming Events in the Cayuga Lake Watershed

Check our website [www.cayugalake.org](http://www.cayugalake.org) & Facebook page for the latest!

**July 31: The 2019 (6th Annual) Finger Lakes Harmful Algal Blooms Symposium, 10 a.m. – 5 p.m.** Hobart and William Smith Colleges 300 Pulteney Street Scandling Center-Vandervort Multipurpose Room 2nd floor Geneva, NY 14456. Co-sponsored by the Finger Lakes Institute and others. To register (modest fee) and view presentation information, google: EventBrite 2019 Finger Lakes Harmful Algal Bloom (HAB) Symposium.

**August 16: THE FIRST Central NY Lakes Association Meeting!!** 8:30 a.m. to 4:30 p.m., The Lodge at Welch Allyn, Skaneateles Falls, NY. This unique conference is organized by New York State Federation of Lakes Associations (NYSFOLA), Cortland-Onondaga Federation of Kettle Lake Associations (C-OFOKLA) and Madison County Federation of Lake Associations (MCFOLA). The objective is to inform, educate, and connect the lakes associations and the municipalities of our region. Professionals will present on anticipated changes in our watersheds, ways to make a difference, and connecting with funding sources. Register here (modest fee, lunch included)—scroll down to “Interactions in the Watershed” link: <https://nysfola.org/>.

**August 21: The Network’s Annual Meeting & Picnic, 5 – 8 p.m.** Cass Park, Route 89, Ithaca. Bring a dish to pass and join us for a relaxing evening. We will have a guest speaker, provide updates on our activities, answer questions, and we’ll conduct a bit of business—Board member elections, via brief Annual and Board meetings. No need to be a member to attend!

**August 16 – end of September: Water/Ways, a multi-site exhibit in Aurora NY.** This travelling Smithsonian Institute exhibit presents perspectives on how we use, enjoy, and think about water in the United States. Accompanying it will be watershed quilts by Network quilters and others. Watch for details at our website and Facebook page.

**September 26:** In conjunction with the Water/Ways Exhibit, the Network will hold an open house at our Stratton Hall office from 5 – 7 p.m., on the Wells College Campus in Aurora. Refreshments and conversation. Also available will be an **evening lake cruise on the Teal**, DiscoverCayugaLake’s beautiful new boat. Check our and their website and Facebook pages.

**September 28: The Seneca County Farm Bureau and Community Science Institute (CSI) will offer a series of presentations** about farming, weather, and Harmful Algal Blooms—a reprise of the free public event held last spring in Aurora. Watch for details at our website and Facebook page, and at CSI’s website.

**October, date and program TBA: CLWN’s Autumn Community Conference**, to be held at the south end of Cayuga Lake. We’ll have several speakers on water-related topics of concern and interest to the public Refreshments; free of charge. Watch for details online, and check our autumn newsletter.

**November, date and program TBA: Season’s End Hydrilla Information Public Event**, with a thank you to our Hydrilla Hunters and other volunteers. Watch for details! More in our autumn newsletter. 🐸

## Become a Member of the Cayuga Lake Watershed Network!

**PLEASE JOIN CLWN**, your lake’s watershed protection organization. Your membership strengthens our ability to protect the lake at the center of our lives. **ENCOURAGE FRIENDS, FAMILY, GROUPS AND BUSINESSES TO JOIN.** You can use the form below to join or renew. Mail completed form with check to CLWN, PO Box 348, Aurora NY 13026. *Thank you.*

Name \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Email \_\_\_\_\_ May we add you to our listserv? ☐ Yes ☐ No

**We have membership levels to suit everyone’s needs. Please check one of the levels below.**

- |   |  |  |  |
|---|--|--|--|
| <input type="radio"/> \$10 Student/Senior | <input type="radio"/> \$35 Family              | <input type="radio"/> \$50 Business/Farm     | <input type="radio"/> \$250 Lake Sponsor         |
| <input type="radio"/> \$25 Individual     | <input type="radio"/> \$50 Organization/Agency | <input type="radio"/> \$100 Headwaters Donor | <input type="radio"/> \$500 Watershed Benefactor |

**We are growing and expanding our effective programs.**

**Would you like to make an extra donation to support this work?**

- \$ \_\_\_\_\_ Unrestricted – for general operations.  
\$ \_\_\_\_\_ To support water quality tests on Canoga, Burroughs, Yawger and Milliken Creeks.  
\$ \_\_\_\_\_ To expand our springtime Embrace the Lake creek, lakefront & ditches cleanups.  
\$ \_\_\_\_\_ Donate \$10 for a packet of common milkweed seeds with planting instructions, to help monarch butterflies.

**TOTAL ENCLOSED:** \$ \_\_\_\_\_ Check # \_\_\_\_\_ (payable to Cayuga Lake Watershed Network please)

Payment can also be made via Paypal/credit card at our website [www.cayugalake.org](http://www.cayugalake.org)

Your Contributions to the Cayuga Lake Watershed Network are Tax Deductible.



Would you like  
☐ 1 or ☐ 2  
full-color CLWN logo  
window stickies (4 x 6")

## The mission...

The Cayuga Lake Watershed Network identifies key threats to Cayuga Lake and its watershed, and it advocates for solutions that support a healthy environment and vibrant, sustainable communities.



### Cayuga Lake Watershed Network

170 Main St., PO Box 348  
Aurora, NY 13026

[www.cayugalake.org](http://www.cayugalake.org)

Office: 607-319-0475

#### OFFICE HOURS:

By appointment.

Please contact

[steward@cayugalake.org](mailto:steward@cayugalake.org)

to arrange.

#### STAFF:

Hilary Lambert, Steward

[steward@cayugalake.org](mailto:steward@cayugalake.org)

Jennifer Tufano Grillo, Staff

[programs@cayugalake.org](mailto:programs@cayugalake.org)

Newsletter Advisory

Committee:

Michael Duttweiler

John Mawdsley

Niamh O'Leary

The Cayuga Lake Watershed Network thanks Leigh Dezelan of Dezelan Design and Pioneer Printing of Lodi for newsletter production excellence.



PO Box 348  
Aurora, NY 13026

NON-PROFIT  
U.S. POSTAGE  
PAID  
TRUMANSBURG, NY  
PERMIT NO. 1

- 🦋 Educate
- 🦋 Advocate
- 🦋 Protect

Current Resident

## Twilight Farm Tours

*You're invited to the farm this summer through a series of drive yourself twilight farm tours organized by Seneca County Cornell Cooperative Extension; Seneca County Farm Bureau and Seneca County Soil and Water Conservation District with local farms.*

**A**griculture has evolved over time and through the adoption of new technologies, equipment and management practices farms have become able to improve food quality, environmental conservation, animal welfare and worker safety. Just as their forefathers did, today's farmers value the land, the water and animals they care for in addition to striving to be good stewards to all resources including the air we breathe.

The twilight farm tour series is designed to provide a firsthand look at different agricultural enterprises which include livestock farms, a vineyard and cash grain operations. The evening tours will provide an opportunity to view and discuss conservation practices adopted by the farms to benefit water quality and soil conservation, ask questions about the practices and technology used by the farm, as well as discuss the challenges and opportunities farmers face today.

Unfortunately, the first tour scheduled for June 26th has been canceled thanks to Mother Nature's lack of cooperation. However, please join us for the remaining twilight tours! July 30 starting at 6:00 pm we will be visiting Wagner Vineyards and August 29 starting at 2:30 pm visiting three farms concluding with a 6:30 pm Cheese Tasting and 7:00 pm Farm to Table locally catered dinner at The Barn At Muranda. All are welcome to attend the Cheese Tasting and Farm to Table Dinner regardless of participation in the farm tours. There is a \$25 fee for those wishing to attend the Cheese Tasting and catered Farm to Table Dinner. The tours are at no charge however, space is limited.

More information about the tours and registration for the Cheese Tasting and Farm to Table dinner are on Seneca County CCE's website or contact Judy Wright, Seneca County CCE at [jlw24@cornell.edu](mailto:jlw24@cornell.edu) or 315-539-9251 ext. 109 to register or with questions. We hope to see you on the farm this summer! 🦋